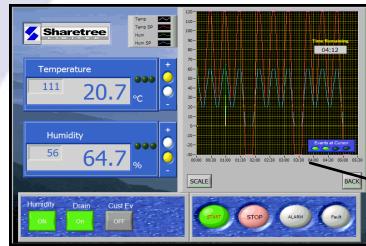


Cyclone-H

With **SIMPLEtouch** programmer

High Performance Test Chambers - *Temperature & humidity*



- Modern attractive styling
- **SIMPLEtouch** programmer
- 216 to 1500 litre capacity
- Wide temperature and humidity ranges
- High performance even under load
- Capacitive humidity probe
- Mechanical cooling
- Robust Reliable construction
- Extensive range of standard options
- Suitable for testing to most standard specifications (e.g. IEC 60068 –3-56, etc)



Sharetree
LIMITED

Temperature/Humidity Testing

Cyclone-H chambers are suitable for both constant temperature/humidity and temperature/humidity cycling applications. Special attention has been given to achieving an evenly distributed air-flow. This ensures consistent conditions throughout the chamber volume and therefore more meaningful test results.

Standard chambers are available with two temperature ranges, using single stage or cascade cooling plant, and with the choice to increase ramp rates through boost heating and cooling options.

The **SIMPLEtouch** touch-screen programmer makes it easy to set-up and monitor the chamber conditions, and is particularly useful for simplifying the programming of complex cycles.

The chambers are attractively styled to blend in with modern production and laboratory equipment and available sizes cover a volume range from 216 to 1500 litres.

Custom chambers and options

Sharetree are able to offer cost effective custom chambers and options where standard solutions are unsuitable, via our in-house manufacturing capabilities. We have many chamber variations and options in our design library that are not shown as standard designs.

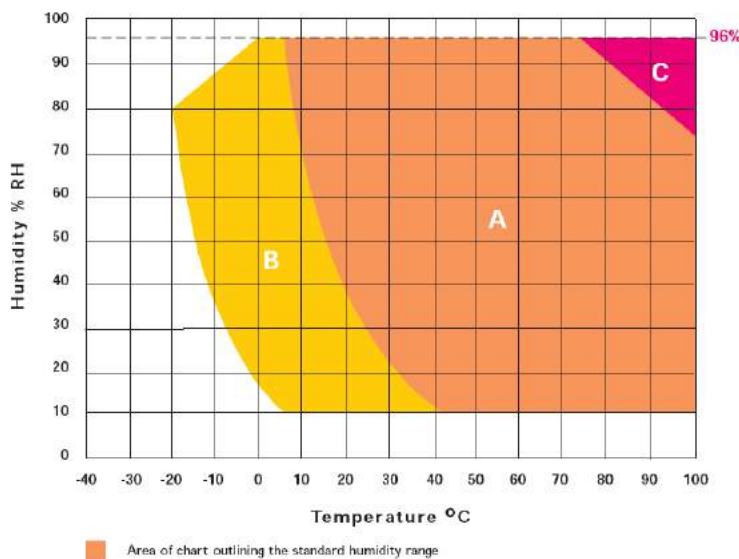
Sharetree has extensive experience of providing complete test systems and will be pleased to discuss specific product interfacing requirements.

Typical Applications

- Temperature/Humidity Testing
- Fixed and cyclic conditions
- Testing of Materials, Components and Assemblies
- Electronics, Automotive and Aerospace



Custom Interior for product interfacing



HUMIDITY RANGE OPTIONS

Humidity control

The Cyclone chamber is designed to accept a wide range of humidity control options to enable a variety of steady state and cyclic damp heat tests to be performed.

Close control of temperature/humidity conditions is achieved by means of an electronic microprocessor controlled dual loop programmer. An electronic capacitive humidity probe is fitted as standard for high reliability and minimum maintenance.

Humidity generation requires a supply of de-ionised water. This may be supplied from a local reservoir or automatically from a mains supply, where available, via an optional de-ioniser unit. Chamber condensate is normally re-circulated to minimise water consumption, but may be drained at programmable intervals if required.

Model Range—Temperature/Humidity (see separate brochure for temperature only chambers)

Order Code	Internal Size (mm)			Volume	External Size (mm)			Temp Range	Ramp Rates (10–90%) Loaded	Under Test Load	
	H	W	D	Litres	H	W	D	°C	°C/min (Average)	Kg	Watts
THC/Cyclone/600/-40/ME	600	600	600	216	1810	1560	1230	-40 to +150	2	25	100
THC/Cyclone/600/-70/ME	600	600	600	216	1810	1560	1230	-70 to +150	2	25	100
THC/Cyclone/1000/-40/ME	1000	1000	1000	1000	2200	2000	1540	-40 to +150	2	50	100
THC/Cyclone/1000/-70/ME	1000	1000	1000	1000	2200	2000	1540	-70 to +150	2	50	100
THC/Cyclone/1500/1000/-40/ME	1000	1500	1000	1500	2200	2500	1540	-40 to +150	2	50	100
THC/Cyclone/1500/1000/-70/ME	1000	1500	1000	1500	2200	2500	1540	-70 to +150	2	50	100

Humidity range options

Replace 'THC' prefix in order code with Humidity Range as shown on the graph	Area A	Area A+B	Area A+C	Area A+B+C
	TH(A)C	TH(AB)C	TH(AC)C	TH(ABC)C

Standard Options

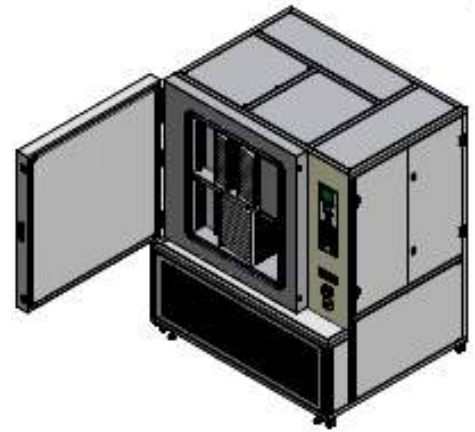
Order Code	Option	Type	Description
W300 W600	Window	Heated, multi-glazed	300 x 300mm with interior lighting 600 x 600mm with interior lighting
CP50 CP100	Cable Port	50mm diameter 100mm diameter	Complete with rubber bung
ECD	Extended Cold Dwells	>12 hours	Avoids frost build-up
E92	Product Protection	Electronic 2-channel	Customer settable upper and lower temperature limits
BHS	Boost Heating	5°C/min Average	Over 10 to 90% of temperature range
BCS (Using indirect LN ₂)	Boost Cooling	5°C/min Average	Over 10 to 90% of temperature range
S600 S1000 S1500	Removable Shelf	600 x 600 1000 x 1000 1500 x 1000	Maximum load 10kg Maximum load 20kg Maximum load 20kg
ST600 ST1000 ST1500	Shelf with Telescopic runners	600 x 600 1000 x 1000 1500 x 1000	Maximum load 10kg Maximum load 20kg Maximum load 20kg
ER	Event Relay	Software controllable	For control of external equipment
AD(-40)	Air Dryer	-40°C dew point	Requires clean, dry compressed air supply
FLP05T	Floating probes	5 x PT100	Logging via SIMPLEtouch programmer
V250	Water de-ioniser	Resin type	Connect to mains water. Wall mounted.
VC250	Replacement cartridge	Resin type	Replacement cartridge for V250

Construction

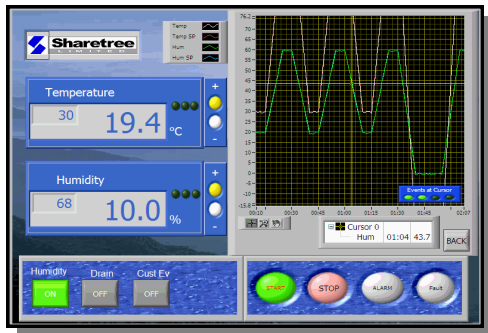
The inner chamber is fabricated from high grade stainless steel for corrosion resistance and easy cleaning. All internal joints are seam welded to ensure a vapour tight construction. The mild steel outer cabinet is attractively styled and has an easy to clean epoxy paint finish.

Dense mineral wool insulation blankets the entire chamber to ensure energy efficient operation.

Full access to the interior is gained through the hinged front door. This has a double sealing arrangement, pressurised by the door catch, to prevent moisture ingress at low temperatures.



Sharetree chambers are designed using 3D-CAD, allowing customers to approve custom designs more easily prior to manufacture.



Powerful fan(s) are used to ensure low thermal gradients and uniform testing of products. The fan motors are mounted outside the chamber for maximum reliability.

The refrigeration plant consists of a single stage or cascade system (depending on temperature range), and is generously sized for long term reliability. Anti-vibration mounts and vibration eliminators minimise noise and vibration.

SIMPLEtouch programmer

All Cyclone chambers now come with our latest SIMPLEtouch touch-screen programmer at no extra cost.

The Sharetree **SIMPLEtouch** Chamber Programmer enables the temperature (and humidity where fitted) to be easily programmed and displayed on Sharetree test chambers.

The touch-screen window gives a clear, user-friendly interface with a constantly updated display of the current set and actual values for temperature and humidity.

SIMPLEtouch uses only commercially available components to ensure low cost of ownership over the lifetime of the chamber.

SIMPLEtouch Features:

- User friendly interface, Windows XPe based
- **QuikSet** Temperature and Humidity entry
- Clear, easy-to-read 7" display
- Comprehensive Graphical Display including:
 - ◇ Set and actual readings
 - ◇ Scaling
 - ◇ Cursor
 - ◇ Event Indicators
- Complex programs (Profiles) including:
 - ◇ Nested loops
 - ◇ Time Remaining display
 - ◇ Hold and Start At functionality
- Logging of results to file
- Bluetooth, Wireless LAN and USB access



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Specifications may vary as part of our policy of continuing product improvement

Sharetree products are designed, manufactured and supported in the UK.



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MEMBER

